NATION'S BUSINESS

How Business Bolsters Our Intelligence Defenses

From building eyes in the sky to advising Presidents, businessmen are deeply involved in an essential but hush-hush national activity

High over the Eurasian land mass, two Project 647 satellites (Made in U.S.A.) patrol unusual "dwelling" orbits, their delicate sensors watching for a missile launching in the Soviet Union or a nuclear explosion in China.

A propulsion engineer in a secure, windowless California office calculates the range of an Egyptian antishipping missile from data gathered by the Central Intelligence Agency. A computer analyst in Boston, his advice needed by the code-breaking National Security Agency, hops a plane to Washington. And a corporate executive answers the President's personal plea for some unpublicized counsel on how to reorganize the Defense Intelligence Agency.

American industry, a world leader in advanced technology, is deep into the complexities of modern intelligence work—and much quieter about it than a swinging James Bond.

The U.S. intelligence establishment, once comparatively simple, is now huge as well as highly sophisticated, costing the government some $6 billion a year and directly employing 200,000 men and women.

One expert has estimated that 70 per cent of this money and manpower is inextricably involved with the science and technology that, in less than two decades, have revolutionized an essential national activity—essential despite the thaw in the Cold War.

The revolution began one December afternoon in 1954 when Trevor Gardner, a former California businessman who was the Air Force's research and development chief, picked up his Pentagon telephone to make a call at the CIA's request. The man he called was Clarence (Kelly) Johnson, Lockheed Aircraft Corp.'s chief designer, in Burbank, Calif. Nineteen months later, Mr. Johnson's ubiquitous U-2—designed, built and tested in an atmosphere of extreme secrecy—made its first spy flight for the CIA over the Soviet Union.

Today, the U-2 still flies reconnaissance missions over Cuba, potential Latin American trouble spots and the troubled deserts of the Middle East. Its intelligence "cover" was blown in 1960 when a Soviet missile knocked Francis Gary Powers from the sky over Sverdlovsk. But its cameras still rank among the world's best, it can slip over a target more easily than a satellite—and it remains an undisputed symbol of modern, technological espionage.

Ironically, Lockheed did almost as much to push the U-2 into the open—by creating superior spycraft, and therefore reducing the need for secrecy about it—as the Sverdlovsk marksmen did. By 1960, work was well along on a supersonic successor aircraft, the Lockheed SR-71, and on increasingly sophisticated spacecraft that keep an entire planet under observation.

Under the peculiar rules of the intelligence game, Lockheed can admit what everyone already knows—that the U-2 was and is a spy plane. However, it can only concede that the Air Force SR-71 has "strategic reconnaissance" as its mission. And the company cannot even discuss the fact that its Agena rockets have carried almost every American spy satellite launched in the past dozen years.

The rocket's role

While the U-2 clearly marked the beginning of the new espionage, the rocket quickly proved a far more dramatic instrument of change.

Sputnik I, launched on Oct. 4, 1957, left no doubt that rocketry had altered man's destiny.

And the prying eye of the intelligence camera soon peered down from 100 miles in space, rather than 100,000 feet. Big names in the high-technology industries were quietly recruited—General Electric Co., CBS Laboratories, Bell Telephone Laboratories, RCA and Philco-Ford, Itek Corp., Eastman Kodak Co., Perkin-Elmer Co., Aerojet-General Corp., TRW Inc.—as well as thousands of smaller suppliers.

Only when first cousins of clandestine devices developed for intelligence work show up in civilian life—in the camera system of the Lunar Orbiter, for example—can companies take oblique credit for remarkable technical achievements.

Industrialist John A. McCone, who succeeded aging spymaster Allen W. Dulles as Central Intelligence Agency director in 1961, and is now back in industry, is given much of the credit for harnessing industry and technology to the intelligence community's needs.

"Dulles had no background for this kind of thing," a top intelligence executive recalls. "McCone had headed the Atomic Energy Commission and been Under Secretary of the Air Force, and he fancied himself something of an engineer.

"He wasn't afraid of the technological game."

The simple communication link that Mr. Gardner used to order the U-2 from Mr. Johnson still operates.

"We can pick up the phone to a West Coast contractor and say, 'Go ahead,'" an intelligence official reports. "Research and development is different in this field than in the military services. We are just plain less bureaucratic.

"Contractors say it is a pleasure to deal with us because they can get decisions quickly. The security rules are hard to live with, but they are more than counterbalanced by the lack of complications."

The leading consumer of new intelligence technology, the CIA, initiates more than 50 per cent of the R&D projects it sponsors but depends on industry for many new ideas. Surprisingly, it and the other intelligence agencies also depend heavily on companies for analytical help. "We don't contract out 'current business' [the hottest new intelligence data] but we might ask someone to do a six-month exhaustive study, say, on the accuracy of an ICBM," one government intelligence official explains.

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